

Our Collective Targets

- 1 *Wise use and restoration of 20 wetlands is linked with the development of sustainable livelihoods, resulting in a strengthened asset base for at least 200,000 people*
- 2 *Species oriented and ecological network initiatives result in improved status of selected wetland biodiversity groups, including waterbirds and freshwater fish*
- 3 *The status of wetland biodiversity is improved in at least 10 globally significant wetland ecoregions*
- 4 *Decisions for the conservation and management of waterbird populations and wetlands on which they depend are influenced by timely analyses.*
- 5 *In 5 major basins implementation of water resource management plans safeguard and restore the role that wetlands play in water supply and regulation*
- 6 *Ecologically sustainable drinking water and sanitation programmes are implemented in 5 WASH initiatives, resulting in improved ecological status of wetlands.*
- 7 *At least 100 Mt of CO2 emissions avoided by conserving and restoring wetlands*
- 8 *UNFCCC policies provide incentives for reducing wetlands emissions in both developed and developing countries and include biodiversity safeguards*
- 9 *Investments in wetland protection and restoration are made through 5 government-led climate change adaptation and/or disaster risk reduction plans*
- 10 *In the catchments of 10 significant wetlands, community resilience to natural hazards, including those exacerbated by climate change is increased through improved environmental management*
- 11 *In at least 5 cases changes will be achieved in the design and/or delivery of major development schemes which threaten significant wetlands or water resources, their biodiversity and livelihoods.*
- 12 *Industry standards, regulations and community practices are improved for at least 3 production systems to prevent the loss of wetlands and their values=*

Wetlands International Achievements 2011 – 2013



We estimate that over this period our projects have been instrumental in directly improving the livelihoods of more than 40,000 people through or linked with wetland wise use and restoration in 9 major wetlands in West Africa, South and South-east Asia and Argentina. Our work to influence land and water use through influencing policies and practices (reported under many other Targets) has indirectly benefitted the livelihoods of many more. [Read more.](#)



We have achieved some good conservation results at a number of key sites, especially for waterbirds and manatees. Ecological network initiatives are at a relatively early stage of development and implementation. We have started to implement a waterbird flyway initiative, 'Arctic to Africa' which will result in improved status of waterbirds in some key sites in Russia and West Africa in future years, with potential for follow up elsewhere. There has been little progress in developing ecological network initiatives for freshwater fish, although there is a European eel initiative currently under active development. [Read more.](#)



We achieved some significant intermediate steps towards this target. Bringing about measurable achievements for biodiversity status at an ecoregional scale often takes decades. There is good opportunity to reach these outcomes through our continued focus in working in a limited number of wetland ecoregions for the long-term. [Read more.](#)



Over this period there was a step change improvement in our results in terms of provision of waterbird population analyses in the Africa-Eurasia flyway context and in boosting capacity development for waterbird conservation in West Africa. Our analyses have influenced AEWA and government priorities for action. There has been no comparable progress in other flyways. [Read more.](#)



In 7 major basins in Africa, Latin America and South Asia we have been successful at developing and influencing development plans and water resource management plans which have or will result in new investments in conserving and restoring the hydrological connectivity of wetlands. We enabled steps towards such achievements in 3 more basins in the S and E Mediterranean. [Read more.](#)



We have made good progress towards this target, with results from 4 targeted initiatives on the design of WASH provision in relation to key wetlands, demonstrating the benefits of an ecosystem-approach to improve the sustainability of this vital development work. [Read more.](#)



Progress has been slower than anticipated in the government and private sectors. However, many of the key building blocks for large scale emission reduction from peatlands worldwide are now in place, largely due to our efforts in this period and earlier years. The commencement of large-scale peatland restoration programmes in Indonesia and Russia with our technical support is starting to show results and this will in turn stimulate further interest and commitments for large-scale investments. [Read more.](#)



Wetlands International has been the first and foremost advocate of peatland development and land-use related CO2 emissions issues in UNFCCC policy processes. We successfully reached our target. Policy influencing is however always work-in-progress as we will need to make sure policies are being implemented in such a way that emissions from wetlands are indeed avoided and biodiversity safeguarded. [Read more.](#)



We have been able to demonstrate the effectiveness of an ecosystem-based approach to Disaster Risk Reduction – and the need for investments in wetlands as part of the solution to reduce vulnerability to natural hazards. We have been able to translate this analysis into actual investments in 3 countries so far. The 3 governments of Indonesia, India and Mali invested in wetland conservation and restoration as a result of our interventions while Senegal and Guatemala are well on the way to commit to wetland investments: Senegal has a CCA/DRR plan but we cannot yet say it includes actual investments in wetlands protection and restoration. [Read more.](#)



We have reached our target to increase community resilience in the catchment of 10 significant wetlands. There is good scope to build on this work and experience with replication and upscaling. [Read more.](#)



We have made good progress towards this target. We managed to influence and trigger adjustment to five major development schemes that impact on wetlands in four countries (Mali, Argentina, China and India). Furthermore, we have made progress through industry partnerships in bringing influence to a sector level (oil and gas, water engineering). [Read more.](#)



Over this period we focused our efforts on the palm oil, soy, peat and biofuels trade chains. We made good progress in achieving new industry standards for palm oil, a certification system for the European peat industry and bringing wetland-specific issues into the soy industry standard processes. We initiated our work on pulp and paper. [Read more.](#)

Collective Target 1 Wise use and restoration of 20 wetlands is linked with the development of sustainable livelihoods, resulting in a strengthened asset base for at least 200,000 people

- Roughly 10,000 people strengthened their asset base through our bio-rights approach¹ in 5 wetlands, where loans are allocated to a large variety of (income generating) activities, depending on local needs; e.g. livestock keeping; grain mills, energy saving stoves, restoration of bourgou fields; small kiosks, vegetable farms or even shelter, in return for the services local people give to conserve and restore wetlands. In Mali, livelihoods of 34 communities in the **Inner Niger Delta** improved while 479 ha of floodplain forest and 148 ha of floodplain grasslands have been restored and bird hunting reduced by 80% in 10 villages. When a newly dug channel in the Delta will be functioning mid-2014, another 1714 ha will be flooded. A micro credit institution manages the fund sustainably with revolving funds. These ecosystems provide fuel, fish and fodder for local people and their livestock, and are important to biodiversity. In **Gambia**, along the Bintang Bolong, a tributary to the Gambia River and in **Guinee Bissau**, along the Cacheu river, 250 households reforested 17 ha of mangroves and improved their income base and nutrition through milling machines and water pumps for vegetable gardens. In **Indonesia**, 800 people benefited from biorights credits along the coasts of Flores Island and West Java while the Indonesian government in Java committed funds to the implementation and management of a bio-rights programme for mangrove restoration in combination with aquaculture.
- We supported a variety of improvements in wetland management such as clearing gullies or making small dams to enhance the sustainable use of the wetland by local communities for agriculture or fisheries. In the **Guanacache lagoons of Argentina** this led to about 400 people having improved access to water and green pasture for their livestock in times of extreme drought.
- In the coastal wetlands of **Sierra Leone** we started to support alternative livelihood activities to reduce overfishing and introduced various alternative methods for cooking, fish smoking or salt drying reducing the need for mangroves as fire wood.
- In the **Mahanadi delta in India**, with our support, the government extension agency now promotes methodologies for sustainable agriculture, i.c. flood resistant crops, affecting around 30,000 people.
- In addition, we supported the development and adoption by (local) government of *management plans for the sustainable use of wetlands with a direct relation to poverty alleviation* in Mali (**Inner Niger Delta**), Indonesia (presidential instruction acknowledging the need for peatland management and its relation to poverty alleviation), **Sierra Leone (Marine Protected Area)** and Malaysia (**Johor peatlands**).

Collective Target 2 Species oriented and ecological network initiatives result in improved status of selected wetland biodiversity groups, including waterbirds and freshwater fish

- In Senegal and Sierra Leone, two reserves have been created for the West African manatee, a large mammal living in coastal wetlands. The Senegal River Basin Organisation modified dams along the river. As a result, no manatees were reported trapped in 2011.
- We trained staff who now make inventories of dolphins in the Saloum Delta, Senegal and Gambia.
- In the Hangzhou Bay Wetland, China, a newly created high-tide roost site and shallow-water feeding area resulted in 2.5 times more (endangered) species being recorded in mid 2011 compared to the 2006-2008 baseline.

¹ The biorights concept consists of implementation of ecosystem restoration such as tree planting or agreements to reduce bird hunting by local communities, combined with provision of micro credits to the participants in the restoration programme. Our role is to link interested communities to micro-credit institutions to ensure professional provision and management of the loans while we provide technical advice to the restoration activities. Successful restoration leads to the conversion of the credits into grants.

- In the South Bug river basin, Ukraine, eight new protected areas (over 3,500 ha) were designated due to our efforts in establishing the significance of these areas for biodiversity.
- We developed the first recovery plan for shorebirds in Patagonia so that we can now identify and promote the designation of new reserves in Argentina and Chile.
- An integrated wetland management plan has been finalised for the Kabaar wetland complex in India, an important biodiversity hotspot for migrating waterbirds.

Collective Target 3 The status of wetland biodiversity is improved in at least 10 globally significant wetland ecoregions

Due to our technical advice, advocacy and communications:

- The protected status of the Bay of Panamá Wetland Wildlife Refuge was reinstated by the Supreme Court, due to active campaigning of many civil society organisations. The Bay is a Ramsar Site and globally significant International Bird Area.
- The Minimum Standards Law for Wetlands Conservation and Wise Use was approved by the Senate of Argentina.
- In India, wetlands are now adequately addressed and linked with the Convention on Biological Diversity national target, which will play an instrumental role in guiding investment planning.
- A national baseline on TEEB² is being established in India. We were one of the three lead authors of the TEEB India scoping report. **Inland wetlands** have been identified as a **priority ecosystem** type for the TEEB India initiative. This will influence choices on development.
- Integrated management plans were adopted by governments for Chilika Lake, India as well as for 2 key Ramsar sites on the Black Sea Coast of Ukraine. A similar plan was developed for the Vembanad Kol wetlands, the largest Ramsar site of India.

Additionally, we have been active in wetland assessments of threats and establishing baselines for measuring biodiversity improvement: for example we established a methodology for assessing and mapping biodiversity and linked livelihoods values and vulnerabilities in the Arctic wetlands;; we did an analysis of the biological diversity and institutional management of the Marshlands of Southern Iraq (the most important wetland system in the Middle East); we contributed to peatland and mangrove mapping in Indonesia and we contributed to the Argentina's wetland inventory.

Collective Target 4 Decisions for the conservation and management of waterbird populations and wetlands on which they depend are influenced by timely analyses on the status and trends of waterbirds.

- Improvements, in data flow of the International Waterbird Census IWC counts resulted in a 46% increase in the number of countries submitting their counts, due to training and a (first ever) meeting of European and Central Asian national coordinators. This gave better coverage and improved insight into status of waterbirds, in turn influencing national policy decisions. Information from the census has provided scientific insights into the rapid climate driven shifts in wintering distributions of three diving duck species, which is of both political and socio-economic importance and will affect wetland management decisions in Northern Europe.
- The Waterbird Population Estimate online tool was produced and launched at the Ramsar COP 11 in Bucharest. The tool combines access to the entire series of five WPE's, the official global reference for countries to designate Ramsar and other important sites.
- We produced the 5th edition of the AEWA³ Conservation Status Review. For the first time, waterbird populations were assessed across their flyways.
- 35 African sites managers along the west coast of Africa from 20 different countries were trained and exchanged experiences on the flyway approach to conservation. This included ecotourism

² TEEB = The Economics of Ecosystems and Biodiversity

³ African-Eurasian Migratory Waterbird Agreement

development policies; opportunities and partnerships along the migration route for cross-border cooperation between sites and networking along the East Atlantic Flyway.

- We maintained full functionality and accessibility of the the Ramsar Site Information Service and Database. This includes not only basic information and downloadable and dynamic maps, but also species annexes, management plans and the ecological character descriptions of Ramsar sites.
- The Critical Site Network (CSN) Tool, which we co-developed, is an online resource for the conservation of 294 species of waterbirds and the sites upon which they depend. The tool strengthens the implementation of the African-Eurasian Migratory Waterbird Agreement (AEWA) and the Ramsar Convention on Wetlands. In 2011, it won the first prize of the international conservation mapping competition in the category best interactive web map from over 100 entries from around the world.

Collective Target 5 In 5 major basins implementation of water resource management plans safeguard and restore the role that wetlands play in water supply and regulation

1. The conservation and wise use of the floodplain wetlands are now included within the water management policy 'Sustainable Development Plan for the Inner Niger Delta' in Mali, which lies in the **Upper Niger Basin**. This plan provides a blueprint for balancing water use for the multiple ecosystem services supporting the livelihoods of the 1.5 million people that depend on the delta for its fish and water for agriculture, cattle and household usage. In 2013, the "Selingue and Markala Water Commission" was able, to some extent, to reach the equitable sharing of scarce resources of the Upper Niger between upstream and downstream stakeholders as a result of our advocacy. 60 institutions, government, civil society, private sectors and local water users, now meet regularly and agree on how to meet the meeting water needs of different stakeholders. We support the Commission with scientific information about the availability of water resources.
2. In 2013, for the first time in 20 years water has reached the **Bassin Ndiael in the Senegal Delta**, an internationally important wetland for water birds and a key natural resource for local communities. The site's water supply was long ago diverted for drinking water supply. In 2013, a water channel was re-established close to the wetland and a channel to the site itself was restored through our work with a local community based organisation. As a demonstration project, this outcome has the potential to be a real game changer in the basin and region. .
3. We facilitated the development of the water policy for Loktak Lake in India (which lies in the **Manipur Basin**) in consultation with the hydropower company, civil society organisations, fisherfolk, farmers and the State Government, who have agreed to implement the policy. With our support, the hydrological regimes have been restored and a water allocation plan was agreed and resourced, including wetland restoration needs.
4. In India's **Mahanadi Basin** an integrated management plan was developed and adopted for Chilika Lake. The plan is being implemented, which will facilitate improvements to the hydrological regime and wetland restoration to better harmonise the economic needs of local communities and nature.
5. The government of Kenya endorsed a Land Use Plan for the Tana Delta (in the **Tana River Basin**); a process we supported. In 2013, we facilitated the establishment of a partnership of international and national government, civil society and academic institutions to assess the options for Tana Delta development. Commitments to carry out a TEEB⁴ assessment have been gained, the first for a major wetland in Africa. This will enable the different development options and their effects on the environment, society and economy of the region to become transparent.
6. We developed a management planning framework for Kanwar Taal (floodplain in **Indo-Gangetic** region in Bihar, India). This is a key step towards securing resources for implementation of the plan with the state government of Bihar and Ministry of Environment and Forests.
7. The conservation and wise use of wetlands are now included within the "Integrated Plan for the Conservation and Sustainable Use of the Paraná Delta", at the end of **La Plata basin** in Argentina.

⁴ TEEB = The Economics of Ecosystems and Biodiversity

This plan is expected to guide land use planning at regional scale within the Delta. At the local scale, we also included wetland services as one of the main pillars in the "Management Plan for the Delta of Tigre", by working in partnership with Fundación Metropolitana and the Municipality of Tigre. This plan is being promoted as a model to be replicated in other jurisdictions of the Delta.

8. In three South and East Mediterranean countries we promoted multi-stakeholder dialogues, resulting in a government commitment to develop an integrated river basin plan for the **Mujib River in Jordan**; a strengthened environmental base for decision-support systems in the **Ichkeul basin, Tunisia** and the establishment of a civil society platform on green issues and the basis for environmentally based water quality monitoring protocol in the **Sebou Basin, Morocco**. Morocco also adapted the EU Water Framework Directive to its local context.

In addition to the specific river basin work above, we have been invited to join a group that will advise the **European Union** Member states on Natural Water Retention Measures to assist Member States in managing risks related to flood, drought and water quality which in turn will provide the basis for improved conservation and restoration of wetlands in river basins. This was achieved thanks to our role the last 3 years in the RESTORE project, a consortium of 6 organisations, in particular around strategic communications and knowledge.

Collective Target 6 Ecologically sustainable drinking water and sanitation programmes are implemented in the country programmes of 5 WASH initiatives, resulting in improved ecological status of wetlands.

- We contributed to preventing transmission of water-related diseases in at least 6 communities, vulnerable to waterborne diseases, in the **Inner Niger Delta in Mali**. We did this by working in partnership with WASH organisations and developed best practices for sanitation, waste disposal and water supply for these communities. Implementation of best practices implied protecting 134,000 people from malaria, schistosomiasis and diarrhea. A scientific paper showing the relation between wetlands and water management in the Inner Niger Delta, including best practices to manage WASH and water related health problems in the region was published by Elsevier in 2012.
- In **Argentina**, we led restoration work in the Ramsar site **Lagunas de Guanacache**, which resulted in improved access to clean water to 400 poor households and also the recovery of some ecological functions of the site. Results of the project were replicated in other areas of the site.
- In **Uganda and Bangladesh** we achieved influencing the WASH sector by working with the local partners in reaching agreements on zoning and planning for water supply and use by the local communities. In particular, restoration activities in the **Rwambu Wetlands** in Uganda resulted in local communities reporting the reappearance of indigenous species around the lake indicating a recovery of the wetlands ecosystems services. Certain wetlands areas were banned for agriculture, certain areas uphill were restored to avoid erosion and there was re-thinking of where to locate latrines and wells.

Collective Target 7 At least 100 Mt of CO2 emissions avoided by conserving and restoring wetlands.

Concretely, so far we avoided over **1.5 MT CO2** emissions through the implementation of pilot projects in Russia and Indonesia. We combine this strategy with influencing (inter)national policies and working with the private sector, which all work towards significant CO2 emission reduction. For example, for the future

- Improved management of existing plantations on peat, notably in Indonesia, could in the short term contribute to emission reduction of up to **50 MT CO2 per year**.
- RSPO members hold, by estimate, around 1 million hectares of as yet undeveloped land on peat. If indeed, this land will not be converted to plantations, this will generate an avoidance of **50 MT CO2 per year**.

- We are in the process of developing a portfolio of large-scale, long-term wetland conservation and restoration projects with Permian Global, who aim to attract investments in tropical forest and peatland conservation through the marketing of carbon credits. The first project involves both partners working together in a joint venture with an Indonesian company, who obtained a license for 65 years to manage an ecosystem restoration concession of 108,000 ha. This will result in avoided emissions as well as carbon sequestration of several million tons CO₂/year.
- Indonesia changed the definition of “degraded peatlands” in its regulations on peatlands and swamps.
- The Johor State government in Malaysia was convinced to permanently protect the last remaining peat swamp forest in Johor.
- In Russia, the government invested in the rewetting of over 70,000 ha of peatlands, including incorporation of ecological rewetting techniques on our advice.
- The Round Table of Sustainable Palmoil (RSPO) adopted new Guidelines and Principles, to which we actively contributed. For example, peatlands will be avoided in new plantation developments; new plantations require designing how to minimise emission; a requirement for public reporting on CO₂ emission and reduction. Potentially this can lead to significant CO₂ reduction. Quantifying the impact of all this is difficult as it depends on many different actors and their behavior in the long-term. However, estimates can be made once RSPO public reporting on GHG emissions commences (in 2017).

Collective Target 8 UNFCCC policies provide incentives for reducing wetlands emissions in both developed and developing countries and include biodiversity safeguards

- The first tangible results of our advocacy efforts were achieved in Durban, South Africa in December 2011 where Ministers agreed that from 2013 developed countries may choose to achieve their emission reduction targets by rehabilitating drained peatlands and count this towards meeting their GHG reduction commitments under the Kyoto Protocol.
- A second achievement for peat soils was realised in the mechanism for reducing emissions from deforestation and forest degradation (REDD+). Ministers adopted a decision which requires that countries that wish to participate in REDD+ must include organic peat soils and the activities that cause peatland degradation in their emissions baseline. This baseline will be used to assess their emission reductions. This agreement will impact bilateral and multilateral investments in peatland conservation, restoration and more sustainable use in Indonesia and other countries with significant peatlands.
- In 2012 we persuaded UNFCCC negotiators of the need to account for all significant carbon pools (including organic soils) when monitoring, reviewing and verifying emissions reductions from REDD+ projects.
- In 2013 we advocated to build forward on achievements in 2011. We also submitted input to the UNFCCC SBSTA⁵ relating to agriculture; putting forward options for sustainable uses of peatlands which can contribute to climate change adaptation and food security.
- We also advocated the need for all countries to address the drivers of deforestation and forest degradation – encouraging action on the demand side for commodities such as palm oil and pulp wood, which are major drivers of tropical peatland degradation.

⁵ Subsidiary Body for Scientific and Technological Advice of the UNFCCC

Collective Target 9 Investments in wetland protection and restoration are made through 5 government-led climate change adaptation and/or disaster risk reduction plans

- **Indonesia's** Ministry of Forestry has allocated a special budget to restore 5,000 ha of coastal wetlands in 2012. We facilitated the issuance of Head District Decree of Sikka that protects all existing mangroves along the coast of Sikka. And we produced a draft map of mangrove distribution for Flores Island.
- The Indonesian Ministry of Marine Affairs and Fisheries made a financial commitment to the development of a hybrid engineering demonstration project along Java vulnerable coastline. In 2013, and based on our advice of Building with Nature principles, they resourced the construction a coastal defense to protect the eroding coast line of Demak district in Central Java, one of the most severely degraded coasts of Indonesia. Wetlands International and the Indonesian Ministry of Marine Affairs and Fisheries committed to further their joint work in an agreement on future cooperation.
- Our work in 19 panchayats – local **Indian** community assemblies - that cover 103 villages in the Mahanadi delta – led in 2012 to allocation of local government funds for implementing disaster risk reduction plans according to the priorities set by villagers. This means that these marginalised poor now have access to government funding for the protection of coastal areas, river banks and for improved water and sanitation. By end 2013, 2.9 million euro was invested by National and State Government programmes to implement community based disaster risk reduction action plans.
- In 2013 the Government of **Senegal** finally has a national policy for the management of wetlands, 40 years after the country signed the Ramsar Convention. This ends conflicts of interest between conservation efforts and pressures for production, food security and residential areas. The policy sets an institutional framework and a basis for strategic direction in the sustainable management of wetlands.
- The government of Mali adopted the new policy 'Sustainable Development Plan for the Inner Niger Delta', which lies in the **Upper Niger Basin**. See also collective targets 1 and 5 on sustainable livelihoods and water supply and regulation.
- In **Guatemala** we contributed to the Inter Institutional Strategic Agenda and the Climate Change Round Table, bringing government, UN agencies and NGOs together around climate change.

Collective Target 10 In the catchments of 10 significant wetlands, community resilience to natural hazards, including those that are exacerbated by climate change is increased through improved environmental management

- In the **Inner Niger delta**, Mali, during the seasonal floods of 2013, 500,000 farmers, fishers and herders were able to adapt their livelihoods strategies due to the active communication through radio, bulletins and atlases of flood information generated through a flood prediction tool (OPIDIN) that we helped to develop. In 2012, 20 villages reduced their disaster risks through a variety of measures linked with ecosystem management, such as fixing sand dunes, establishment of a green belt of trees to protect houses and farmland, and reforestation to reduce wind damage to crops.
- In **Ewaso Ng'iro river basin, Kenya**, roughly 40,000 people are now better prepared for droughts and floods. Lower stream (agro) pastoral communities, whose only rainfall is the river, are engaged in tree planting, wetlands protection, conservation agriculture and rotational grazing and river banks protection. Our advocacy resulted in the development, in the upstream county, of a water policy that promotes efficient water use and ensures river flow to the vulnerable lower-stream communities.
- In **Nusa Tenggara Province, Indonesia**, the resilience of 7 villages was increased, in one of Indonesia's most disaster prone coastal zones - by tree planting as a coastal buffer and working with the local government on policies to declare a moratorium on mangrove conversion as well as promoting construction of more 'green belts'.

- **Along the coast of Central Java, Indonesia**, the community in Timbul Sloko had seen their village and its surroundings slowly disappear into the sea as a result of human induced coastal erosion. Appreciating the results of a Building with Nature approach to coastal defense that enables mud build up and the conditions for mangrove re-establishment to be created, they demarcated a 100 ha coastal belt as a protected area, working with government on the right legal status needed. They abandoned their plans to relocate the village to Central Kalimantan.
- On the coast of **West Java, Indonesia** we supported building of facilities for coastal management and protection In Banten bay, by sediment trapping using sand bags, which attracted natural growing of mangrove.
- In the **Mahanadi Delta, India** In 2011 we equipped 212 villages – totaling 7,000 households – with a risk reduction plan. In 2012, we supported the government extension agency to develop and roll out methodologies for sustainable agriculture affecting 60 villages and flood prone land, including example promoting the use of flood resilient crops. This has reduced farmer vulnerability to climate change and increased crop production. In 2013 when cyclone Phalin struck in India, one of the villages we work with proved to be well prepared; people could be quickly evacuated, a committee was in place to manage relief and rehabilitation funds and villagers were quickly organised to rehabilitate their destroyed betel plantations such as to ensure their income generation.
- In the **Ganges flood plains, Bihar India** community resilience to devastating floods due to channelisation of rivers, was increased through Disaster Management Committees in 84 villages. In addition, more than 1000 farmers changed to crop varieties that can withstand extended waterlogging, in 13 villages ponds were renovated and rejuvenation of drainage channels in 8 villages reduced waterlogging in agricultural fields. During the 2013 floods in the districts of Bhagalpur and Munger, the Committees proved very effective with timely collecting information from upstream Balmiki Barrage on the quantum of water released, initiating a chain of events for disaster response. An assessment of these floods against similar floods of 2008 (around 250 ha flooded), indicate significant reduction loss of lives (22 compared to 110), loss of livestock and damage to houses. Now, we are working with the government on natural solutions for managing floods by restoring wetlands in the **Masá sub basin in Guatamala**, the risk of land- and mudslides and vulnerability to weather were reduced, forest and soil conservation measures were implemented and consequently livelihoods improved for more than 300 families in 4 villages. To further improve the livelihoods we invited experts to explain vegetable gardening techniques, provided chickens for livestock, and built installations for passion fruit and granadilla production.
- In the **Inal and Tapacal river basins, Nicaragua**, 50,000 people are now covered by risk reduction plans and have implemented a variety of activities, often infrastructural solutions, such as improving drainage, building rock dams, constructing a retaining wall to prevent landslides, establishing a water catchment tank to dam water and mitigate flooding risk.
- In **Uganda**, 73,000 people have risk reduction plans to deal with floods and droughts and started implementing these through such as water harvesting and flood diversion canals.

Collective Target 11 In at least 5 cases changes or adjustments will be achieved in the design and/or delivery of major development schemes which threaten significant wetlands or water resources, so as to avoid or reduce impacts on biodiversity and livelihoods.

- The **Fomi Dam** planned in the Upper Niger River in Guinea development was delayed and there will be redesign and consideration of operation with a view to minimising downstream impacts as a result of our advocacy to the Guinean and Malian Governments, the Niger River Basin Authority and the African Development Bank. This change in the design of the dam implies that there will be less impact downstream on people and nature dependent on the Inner Niger Delta.
- A **provincial Argentinian law was revoked** that aimed to grant ownership of public lands for rice cultivation in Entre Rios Province due to our advocacy and that of our partners. The plans were to allow cultivation in wetlands areas that were considered “unproductive”.

- In China, collaboration with **Rio Tinto**, resulted in a concept with solutions for the incorporation of the biodiversity values in the development planning for a **port development**. In 2012, access to 350 ha of land to develop a Wetland Centre was agreed. In addition, the provincial government is evaluating the establishment of a Nature Reserve along 20 km of the coast used by migratory waterbirds.
- In India, through our work over the last decade, agreement has been reached to adjust the operations of a hydropower company in the basin of Loktak Lake. Additionally, our work in the Mahanadi Basin has led to an agreement to alter the operations of an upstream barrage that influences the hydrology of Chilika Lake and the surrounding agricultural wetlands.
- In many of the projects that we have co-created with **Shell**, we are succeeding to influence their **oil and gas operations** by providing knowledge and expertise aiming at reducing the impact of the site operations on biodiversity and wetlands or by committing to restoration activities. This has happened in for example Iraq (considering ecosystem approach in action plans), Brunei (restoration in degraded areas), and the Arctic (recommendations in relation to minimising impacts of infrastructure development).
- We have developed new partnerships and projects with **engineering and dredging companies Boskalis and Van Oord**, to produce knowledge jointly on **greenhouse gases emission reduction in water infrastructure projects**, which have the potential for influencing future design and siting of water infrastructures.

Collective Target 12 Industry standards, regulations and community practices are improved for at least 3 production systems to prevent the loss of wetlands and their values, such as for water, climate regulation and biodiversity

In 2013, new **Principles and Criteria were adopted by RSPO** that encourage CO2 emission reduction. One of the most important issues is that peatlands will be avoided in new plantation developments that new palm oil plantations will need to address how to minimise emissions. Linked to our active role in the RSPO was participation in working groups, a leadership role in the science review on greenhouse gas emissions and other social and environmental impacts. We provided significant input to the RSPO's Best Practice Manual for Existing Oil Palm Plantations on Peat.

- We influenced discussions and policies about the (lack of) sustainability standards and practice of the palm oil industry in peat swamp forests. The US Environmental Protection Agency, using our input, excluded palm oil from bio-energy subsidies while the EU excluded any biomass produced at the cost of wetlands or peatlands from biofuel support policies.
- Our publications on peatland CO2 emissions led to coverage by major news agencies around the world.
- Through dialogue with the **peat producer's associations** we supported the creation of a certification system for the European industry that produces growing media for horticulture made with peat (a substantial industry that impacts on peatlands in Europe). We are now a Board member of the multi stakeholder initiative Responsibly Produced Peat Foundation (RPP).
- We help to design the appropriate policy text providing formal guidance on implementation of the **European Union's Renewable Energy Directive** with regard to **biofuels** produced on peatlands that impact on previously undrained peat soils.
- By being a member of the **Round Table on Responsible Soy**, we managed to bring the issue of wetland degradation due to quick soy expansion to the table. We corrected the definition of wetlands within the Soy Standard and its review now considers wetland ecosystems better. As part of the RTRS pesticides group, we contributed to the prohibition of use of certain pesticides by mid-2017, after which certain highly polluting pesticides shall be eliminated.